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## ALARM SYSTEM WITH INDIVIDUAL ALARM INDICATOR TESTING

## ABSTRACT OF THE DISCLOSURE

5 A building alarm system includes addressable  
notification appliances connected to a system controller,  
with each notification appliance having a status indicator  
and an alarm indicator. The status indicator, such as an  
LED, provides for system test modes that avoid disruption  
of building occupants. To test the alarm system, the  
system controller selects which notification appliances to  
10 operate in response to a test alarm input and communicates  
to each selected appliance an instruction to operate its  
associated status indicator without operating its  
associated audible or flashing visible alarm indicators.  
In a troubleshooting mode, the system controller polls each  
15 of the notification appliances and receives an answer in  
response to the poll from any of the appliances. The  
controller operates the LED indicators of those appliances  
which answer the poll. This allows a technician to locate  
for troubleshooting only those appliances having an  
20 nonoperating LED indicator, perhaps due to a failure to  
respond to its poll. According to another aspect, each  
addressable notification appliances includes a  
microprocessor and a manually-activated switch. The  
microprocessor is programmed to transmit a first message in  
25 response to an activation of the switch. The system  
controller receives the first message from the activated  
appliance and in response transmits a second message  
instructing the appliance to operate its associated alarm  
indicator for a test time interval.